

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended) A water pressure system comprising:
a submersible pump for pumping water from a water bearing aquifer;
a pressure tank installed in a well casing of the water pressure system, and connected to the submersible pump with a drop pipe, the pressure tank including an inlet end, an outlet end, and an outer sidewall with ~~an~~ a flexible diaphragm bladder located within the outer sidewall of the tank that is fillable with water from the submersible pump for storing a reserve of water; and
~~a pressure switch coupled to an air chamber of the pressure tank between the outer sidewall of the tank and the flexible bladder that is pre-charged with pressurized air for monitoring pressure in the tank and controlling operation of the submersible pump~~
a relief valve and a flow control valve installed between the submersible pump and the pressure tank.

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Claim 2 (original) The water pressure system of claim 1 wherein the pressure tank is small enough to fit underground within the well casing of a water well.

Claims 3-7 (canceled)

Claim 8 (original) The water pressure system of claim 1 further comprising a flow control valve connected between the submersible pump and the pressure tank for maintaining constant water pressure in the system.

Claim 9 (original) The water system of claim 1 wherein the submersible pump is a variable speed pump for maintaining constant water pressure in the system.

Claim 10 (currently amended) A water pressure system for use with underground water wells comprising:

a submersible pump installed in an underground well of a water pressure system;

a1 a first drop pipe having a first end and a second end opposite the first end, the first end connected to the submersible pump for pumping water from a water bearing aquifer;

a relief valve and a flow control valve connected to the second end of the first drop pipe to maintain the flow of water in the system at a constant pressure and relieve pressure from the flow control valve;

a pressure tank installed in a well casing of the water pressure system, and connected to the second end of the first drop pipe, the pressure tank including an inlet end connected to the flow control valve, an outlet end, and an outer sidewall with an flexible diaphragm bladder located within the outer sidewall of the tank that is fillable with water from the submersible pump for storing a reserve of water;

a second drop pipe having a first end and a second end opposite the first end, with the first end connected to the outlet end of the pressure tank;

a pitless adapter having an inlet connected to the second end of the second drop pipe, and
an outlet connected to a discharge pipe; and

~~a pressure switch coupled to an air chamber of the pressure tank between the outer
sidewall of the tank and the flexible bladder that is pre-charged with pressurized air for monitoring
pressure in the tank and controlling operation of the submersible pump.~~

Claim 11 (original) The water pressure system of claim 10 wherein the pressure tank is
small enough to fit in the well casing of a water well.

Claims 12-16 (canceled)

Claim 17 (currently amended) A water pressure system comprising:

a variable speed submersible pump installed in a water well;

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a pressure tank installed in a well casing of the water pressure system, and connected to
the variable speed submersible pump with a drop pipe, the pressure tank including an inlet end, an
outlet end, and an outer sidewall with an flexible diaphragm bladder located within the outer
sidewall of the tank that is fillable with water from the submersible pump for storing a reserve of
water; and

~~a pressure switch coupled to an air chamber of the pressure tank between the outer
sidewall of the tank and the flexible bladder that is pre-charged with pressurized air, the pressure
switch coupled to the air chamber of the pressure tank with an air line for monitoring pressure in
the tank and controlling the speed of the variable speed submersible pump.~~

Claim 18 (currently amended) The water pressure system of claim ~~18~~ 17 wherein the pressure tank is small enough to fit in the well casing of a water well.

Q1
Claim 19 (canceled)

Claim 20 (new) The water pressure system of claim 1 wherein the relief valve and flow control valve are integral with each other in a single valve assembly.

Q2
Claim 21 (new) A pressure tank comprising:
an outer sidewall with an inlet end, an outlet end;
a flexible diaphragm bladder separating an air chamber from a liquid chamber;
a confining tube located between the outer sidewall and the flexible diaphragm bladder for supporting and preventing the bladder from over expanding and sealing off liquid flow between the bladder and the outer sidewall;
a valve for pressurizing the air chamber; and
wherein the confining tube allows the flow of liquid around the outside of the bladder from the inlet end of the pressure tank through the outlet end of the pressure tank.